(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification⁷: G06T 17/50

(21) International Application Number:
PCT/GB2004/005105

(22) International Filing Date: 6 December 2004 (06.12.2004)

(25) Filing Language: English

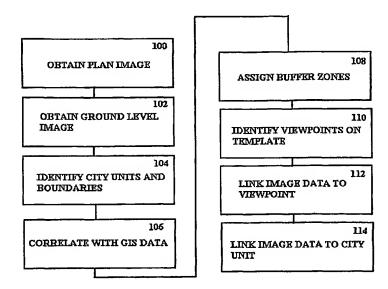(26) Publication Language: English

(30) Priority Data:
0328420.5 8 December 2003 (08.12.2003) GB

(71) Applicant (for all designated States except US): GMJ CITYMODELS LTD [GB/GB]; 115A Cleveland Street, London W1T 6PU (GB).

(72) Inventors; and
(75) Inventors/Applicants (for US only): GRAVES, Robert [GB/GB]; 7b Greenland Road, London NW1 0AX (GB). JONES, Didier, Madoc [GB/GB]; Flat1, 2 Clanricarde Gardens, London W2 4NA (GB).

(74) Agents: ROBERTS, Gwilym, Vaughan et al.; Kilburn & Strode, 20 Red Lion Street, London WC1R 4PJ (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(54) Title: MODELLING SYSTEM

(57) Abstract: A three dimensional model of an urban area is produced by processing a stereo aerial view of the urban area to obtain a three dimensional map, identifying city units by correlation with a geographical database and obtaining ground level image data relating to city units from photographic or laser scan image data. Data from the various sources is correlated to provide a high resolution geographically accurate three dimensional model of the urban area. The viewpoints from which ground level data is obtained are shown on the model and are linked to the underlying image data such that the model further provides an integrated database. As a result an accurate, rapidly processed and easily updateable three dimensional model is provided.

Published:
— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.